

WHAT IS CLAIMED IS:

1. A method of preparing a sterile water, comprising:  
preparing a first component containing hypochlorite or  
5 chlorite and held in a first sealed space, and a second  
component containing an acid and held in a second sealed  
space; and  
mixing the first and second components together to  
prepare a sterile water,  
10 wherein the first and second components are conditioned  
so that the sterile water resulting from mixture of the first  
and second components has a predetermined effective chlorine  
concentration and a pH level within the slightly acidic or  
neutral region.  
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2. The method according to claim 1 wherein the first  
and second components are conditioned so that the sterile  
water resulting from mixture of the full quantity of the  
first component in the first sealed space and the full  
20 quantity of the second component in the second sealed space  
has a predetermined effective chlorine concentration and a pH  
level in the slightly acidic or neutral region.
3. The method according to claim 1 wherein the first  
25 sealed space is defined by a first container; and the second  
sealed space is defined by a second container.
4. The method according to claim 1 wherein the first  
and second sealed spaces are defined in a single container.  
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5. The method according to claim 1 wherein the first  
component is an alkali liquid having a pH level equal to or  
higher than 10.
- 35 6. A method of preparing a sterile water, comprising:

preparing a first component containing a hypochlorite or chlorite and held in a first sealed space, and a second component containing an acid and held in a second sealed space; and

5        mixing the first and second components with a predetermined amount of water to prepare a sterile water, wherein the first and second components are conditioned so that the sterile water resulting from mixture of the first and second components with the predetermined amount of water  
10       has a predetermined effective chlorine concentration and a pH level within the slightly acidic or neutral region.

7. The method according to claim 6 further comprising: preparing an instruction manual having a description on  
15       quantities of the water to be mixed, wherein the instruction manual will guide a user to introduce the first and second components into the predetermined amount of water specified in the instruction manual.

20       8. A package of sterile source materials, comprising: a first component containing a hypochlorite or chlorite;  
a second component containing an acid;  
25       a single container holding the first component and the second component separately with a partition; and a movable member which can move under application of an intentional force from outside the container,  
wherein movement of the movable member permits the  
30       first component and the second component to merge and produce a sterile water in the container; and wherein the first component and the second component are conditioned to assure that the sterile water produced by mixture thereof has a predetermined effective chlorine  
35       concentration and a pH level within the slightly acidic or

neutral region.

9. The package of sterile source materials according to claim 8 wherein the movable member comprises a cutter  
5 capable of breaking the partition and permitting the first component and the second component to merge.

10. A package of sterile source materials comprising:  
an outer container holding one of a first component  
10 containing a hypochlorite or chlorite or a second component containing an acid;

an inner container housed in the first container and holding the other of the first and second components;

a sealing member which seals the inner container; and

15 an operation member provided in association with the outer container and accessible from outside the outer container,

wherein manipulation of the operation member frees the inner container from the sealing member and permits the other  
20 component in the inner container to flow out into the outer container and produce a sterile water; and

wherein the first and second components are conditioned so that the sterile water produced by mixture thereof has a predetermined effective chlorine concentration and a pH level  
25 within the slightly acidic or neutral region.

11. The package of sterile source materials according to claim 10 wherein the operation member includes a seal cap for the outer container.

12. The package of sterile source materials according to claim 10 wherein the operation member comprises a pusher combined to the outer container and having a portion exposed outside the outer container.

13. The package of sterile source materials according to claim 10 wherein the outer container has a mouth; and the package of sterile source materials includes:

a circumferential sealing member provided inside the mouth;

a movable member having a circumferential recess sealed by the circumferential sealing member; and

a seal cap which closes the mouth,

wherein the circumferential recess comprises the inner container, and manipulation of the seal cap causes the movable member to fall, thereby release the circumferential recess from the seal member, and thereby permit the other component from the circumferential recess into the outer container.

14. A package of sterile source materials comprising: an outer container holding one of a first component containing a hypochlorite or chlorite or a second component containing an acid;

an inner container housed in the first container and holding the other of the first and second components;

a plug in close fitting in an opening formed in the inner container to communicate with the internal space of the outer container,

an operation member associated with the plug and accessible from outside the outer container,

wherein intentional manipulation of the operation member causes the plug to get out of the opening of the inner container in response to movement of the operation member, and thereby permits the other component to flow out from the inner container into the outer container and to produce a sterile water; and

wherein the first and second components are conditioned so that the sterile water produced by mixture thereof has a predetermined effective chlorine concentration and a pH level

within the slightly acidic or neutral region.

15. The package of sterile source materials according to claim 14 wherein the operation member includes a seal cap  
5 for the outer container.

16. A package of sterile source materials, comprising:  
an outer container holding one of a first component  
containing a hypochlorite or chlorite and a second component  
10 containing an acid;

an inner container housed in the outer container and  
holding the other of the first component and the second  
component, said inner container being composed of a first  
member fixed to the outer container and a second member  
15 movable relative to the first member;

an operation member associated with the second member  
and accessible from outside the outer container;

wherein intentional manipulation of the operation  
member causes the second member to move and partly open the  
20 inner container and thereby permits the other component to  
flow out from the inner container into the outer container  
and to produce a sterile water; and

wherein the first and second components are conditioned  
so that the sterile water produced by mixture thereof has a  
25 predetermined effective chlorine concentration and a pH level  
within the slightly acidic or neutral region.

17. The package of sterile source materials according  
to claim 16 wherein the operation member includes a seal cap  
30 of the outer container.

18. A package of sterile source materials comprising:  
an outer container having a mouth and holding one of a  
first component containing a hypochlorite or chlorite and a  
35 second component containing an acid;

an inner container having an upper end mouth opened upward and held in the outer container by engagement of the upper-end mouth with the mouth of the outer container, and holding the other of the first component and the second component; and

a seal cap closing the mouth of the outer container and closing the upper-end mouth of the inner container

wherein depression of the upper-end mouth of the inner container exposed by removal of the seal cap causes disengagement of the upper-end mouth of the inner container and the mouth of the outer container, thereby causes the inner container to drop into the outer container, and permits the other component to flow out of the inner container into the outer container and to produce a sterile water; and

wherein the first and second components are conditioned so that the sterile water produced by mixture thereof has a predetermined effective chlorine concentration and a pH level within the slightly acidic or neutral region.

19. The package of sterile source materials according to claim 18 wherein at least the upper-end mouth of the inner container is made of a soft material easily flexible with a finger force.

20. A package of sterile source materials comprising:  
an outer container having a mouth and holding one of a first component containing a hypochlorite or chlorite and a second component containing an acid;

an inner container having an upper end mouth opened upward and held in the outer container by engagement of the upper-end mouth with the mouth of the outer container, and holding the other of the first component and the second component; and

a seal cap closing the mouth of the outer container and closing the upper-end mouth of the inner container

wherein a sterile water can be prepared by removing the seal cap, next removing the inner container out of the outer container, then pouring the other component from the inner container into the outer container; and

5        wherein the first and second components are conditioned so that the sterile water produced by mixture thereof has a predetermined effective chlorine concentration and a pH level within the slightly acidic or neutral region.

10        21. A sterile water preparation kit comprising:

      a first container holding one of a first component containing hypochlorite or chlorite and a second component containing an acid;

15        a second container holding the other of the first and second components; and

      an instruction manual having a description on quantities of the first component, quantities of the second component and quantities of the water to be mixed with the first and second components,

20        wherein the instruction manual guides a user to introduce the first and second components into a predetermined amount of water to produce a sterile water; and

      wherein the first and second components are conditioned so that the sterile water produced by mixture thereof with  
25        the predetermined amount of water has a predetermined effective chlorine concentration and a pH level within the slightly acidic or neutral region.

      22. A spatial sterilization apparatus comprising:

30        a supersonic generator for atomizing a sterile water containing hypochloric acid and having an effective chlorine concentration suitable for spatial sterilization and a pH level within the slightly acidic or neutral region;

      an electric main fan for generating an air flow toward  
35        an open space; and

a second electric fan for carrying fog of atomized sterile water from the supersonic generator to the proximity of the main fan,

wherein the fog of the atomized sterile water is  
5 sprayed with the aid of the air flow generated by the main fan.

23. The spatial sterilization apparatus according to claim 22 further comprising a cartridge tank which can  
10 contain the sterile water containing hypochloric acid prepared by a user by mixing a first component and a second component, said first component containing a hypochlorite of a pre-adjusted concentration and contained in a first sealed space, and said second component containing an acid of a pre-  
15 adjusted concentration and contained in a second sealed space; and

wherein said supersonic generator atomizes the sterile water supplied from the cartridge tank.

24. The spatial sterilization apparatus according to  
20 claim 23 wherein the spatial sterilization apparatus is adaptive to receive the supply of the sterile water selectively from the cartridge tank or from an pipe arrangement.

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25. A portable spatial sterilization apparatus comprising:

a cartridge tank which can contain a sterile water having an effective chlorine concentration suitable for  
30 spatial sterilization and a pH level within the slightly acidic or neutral region, said sterile water being prepared by a user by mixing a first component and a second component, said first component containing a hypochlorite of a pre-adjusted concentration and contained in a first sealed space,  
35 and said second component containing an acid of a pre-



adjusted concentration and contained in a second sealed space;

a supersonic generator for atomizing the sterile water supplied from the cartridge tank;

5 an electric main fan for generating an air flow toward an open space; and

a second electric fan for carrying fog of atomized sterile water from the supersonic generator to the proximity of the main fan,

10 wherein the fog of the atomized sterile water is sprayed with the aid of the air flow generated by the main fan.

26. The portable spatial sterilization apparatus  
15 according to claim 25 wherein the sterile water having the effective chlorine concentration suitable for spatial sterilization is produced by diluting mixture of the first component and the second component with water upon or after mixture thereof.

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27. The portable spatial sterilization apparatus according to claim 25 wherein the main fan and the second electric fan are a single common electric fan.

25 28. A spatial sterilization method comprising the steps of:

preparing a sterile water having an effective chlorine concentration suitable for spatial sterilization and a pH level within the slightly acidic or neutral region by a  
30 user's manipulation of mixing a first component and a second component, said first component containing a hypochlorite of a pre-adjusted concentration and contained in a first sealed space, and said second component containing an acid of a pre-adjusted concentration and contained in a second sealed  
35 space;

charging a tank with the sterile water prepared;  
producing fog of sterile water by atomizing the sterile  
water supplied from the tank;

5 guiding a flow of the fog of the sterile water to the  
proximity of a main fan for generating an air flow toward an  
open space; and

spraying the flow of the fog of the sterile water  
guided to the main fan to a distance by using the air flow  
generated by the main fan as a carrier flow.

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29. The spatial sterilization method according to  
claim 28 wherein water for dilution is added to mixture of  
the first component and the second component upon or after  
mixture thereof.

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